(Amended) A method of form line following, comprising the steps of:

computing a form line pattern for at least a portion of a plot of land from one or
more data values retrieved from a computer readable storage medium, said data values
associated with terrestrial locations comprising said portion of said plot of land;

controlling a vehicle so as to follow said computed form line pattern over said plot
of land using positioning information provided by one or more sources of GPS
information;

computing an updated form line pattern in response to form line following
correction inputs, said updated form line pattern being derived from one or more
deviations from said positioning information; and
controlling said vehicle so as to follow said updated form line pattern.

REMARKS

The foregoing amendment and the following remarks are responsive to the Office Action mailed July 31, 1998. Reconsideration of this application in light of the amendment is respectfully requested.

The present claims are patentable over the Dano reference (U.S. Patent No. 4,398,195). Dano discloses a microprocessor for controlling a radar trilateralization system for guiding aircraft flight patterns. See Dano at col. 2, ll. 59-63. A plurality of transponders are set up at known positions relative to a baseline. The system uses radar techniques to feed radar derived information into the microprocessor. The microprocessor subsequently calculates the aircraft's position from the radar signals, relates the position to a desired flight pattern and then gives an instrument readout (col. 2, ll. 65 - col. 3, ll. 7). In addition, Dano discloses the microprocessor making corrections for propagation delay of radar pulses and skewing between a field plane and a plane defined

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by the aircraft (col. 4, ll. 6-24). Nevertheless, Dano does not disclose updating a form line according to one or more deviations from the form line.

Claim 1 recites updating a second form line according to one or more deviations from the second form line. Dano does not disclose deviations in a swath or form line. Therefore, Dano does not disclose updating a second form line according to one or more deviations from the second form line. Accordingly, Claim 1 is patentable over Dano. Independent Claims 4, 7 and 12 also recite updating a form line in response to deviation information. Consequently, Claims 4, 7 and 12 and dependent Claims 5-6, 8-11 and 13-14 are also patentable over Dano.

In addition, the present claims are patentable over Dano even when considered in consideration with the Teach reference (U.S. Patent No. 5,334,987). Teach discloses an aircraft control system for use in an agricultural aircraft for applying chemicals to an agricultural field. See Teach at col. 2, ll. 34-40. The control system comprises a global positioning receiver for receiving signals from satellites and a computer system for storing surface coordinates of the boundary of the agricultural field (col. 2, ll. 40-44). The signals are decoded by the computer system in order to continuously determine the position of the aircraft. The actual position of the aircraft is then compared to the desired flight pattern (col. 2, ll. 44-55). Additionally, the system includes a pilot interface that indicates deviation in position of the aircraft from the desired flight pattern (col. 2, ll. 56-63). Although Teach discloses using global positioning information to aid in guiding an aircraft along a desired flight pattern, Teach does not disclose updating a form line according to one or more deviations from the form line.

As described above, Claim 1 recites updating a second form line according to one or more deviations from the second form line. Like Dano, Teach fails to disclose deviations in a swath or form line. Thus, Teach does not disclose updating a second form line according to one or more deviations from the second form line. Independent Claims

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4, 7 and 12 also recite updating a form line in response to deviation information.

Consequently, Claims 4, 7 and 12 and dependent Claims 5-6, 8-11 and 13-14 are also patentable over Teach. Therefore, the present claims are patentable over Dano even in view of Teach.

Applicants acknowledge the allowance of Claims 2-3. Further, the drawings filed on April 28, 1997 were objected to by the PTO draftsperson. Formal drawings will be submitted upon allowance of the application.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 11/6, 1998

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

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